Theoretical Computer Science
Algorithms, automata, complexity and games

Volume 180, Numbers 1–2, 10 June 1997

Abstracted/Indexed in: ACM Computing Reviews, Compuscience, Computer Abstracts, Current Contents: Engineering, Technology & Applied Science, Engineering Index/Compendex, INSPEC Information Services, Mathematical Reviews, Zentralblatt für Mathematik

Contents

Contributions

M. Madonia and S. Varricchio
Some decisional problems on rational relations 1

V. Arvind and N.V. Vinodchandran
Solvable black-box group problems are low for PP 17

K. Hosaka, Y. Takenaga, T. Kaneda and S. Yajima
Size of ordered binary decision diagrams representing threshold functions 47

F. Bassino
Nonnegative companion matrices and star-height of $\mathbb{N}$-rational series 61

E. Garel
Séparateurs dans les mots infinis engendrés par morphismes 81

M.-F. Sagot, A. Viari and H. Soldano
Multiple sequence comparison – a peptide matching approach 115

H. Yamamoto
On the power of alternation on reversal-bounded alternating Turing machines with a restriction 139

Z. Chen and S. Homer
Learning counting functions with queries 155

H. Shen and W. Liang
Efficient enumeration of all minimal separators in a graph 169

C. Pomerance, J.M. Robson and J. Shallit
Automaticity II: Descriptional complexity in the unary case 181

V.J. Leung
The undecidability of the unrestricted modified edit distance 203

D. Grigoriev
Testing shift-equivalence of polynomials by deterministic, probabilistic and quantum machines 217

M. Matamala
Alternation of cellular automata 229

A.E. Andreev, A.E.F. Clementi and J.D.P. Rolim
Optimal bounds for the approximation of boolean functions and some applications 243

V. Giakoumakis and J.-M. Vanherpe
On extended P_4-reducible and extended P_4-sparse graphs 269

B. Codenotti, B.N. Datta, K. Datta and M. Leoncini
Parallel algorithms for certain matrix computations 287

M. Karpinski, L.L. Larmore and W. Rytter
Correctness of constructing optimal alphabetic trees revisited 309

P. Péladeau, H. Straubing and D. Thérien
Finite semigroup varieties defined by programs 325

Notes

M. Kudlek and A. Mateescu
On distributed catenation 341

J. Dassow and V. Mitrana
Cooperation in context-free grammars 353

V.F. Sirvent
On some dynamical subsets of the Rauzy fractal 363

R. David and K. Nour
A syntactical proof of the operational equivalence of two λ-terms 371

Author index volume 180 377

Master index volumes 171–180 379